A new generation of heat pumps
DESIGNED FOR EARTH

NIBE

NIBE Exhaust air

A NEW GENERATION OF HEAT PUMPS

WHY THROW OUT OLD ENERGY WHEN YOU CAN RECYCLE IT INSTEAD?

An exhaust air heat pump is basically an energy recycling system. It collects energy from the warm inside air as it leaves your home via the ventilation system, and re-uses it to heat up fresh incoming air and tap water.

If you're building a new house or developing new apartments, now's the perfect time to take advantage of NIBE's energy efficient heating technology. Install an exhaust air heat pump and you can enjoy a healthy, oxygen-rich atmosphere inside your home, at the same time as reducing your electricity consumption by more than 50%.

It's amazing, but true. We know, because we've already been using heat pump technology in Sweden for over 30 years. What's more, exhaust air heat pumps have been more or less mandatory in all Swedish houses built since the 1980's, due to changes in Swedish building regulations, which is why NIBE's developers have had plenty of time to refine the technique!

WHEN TO CHOOSE AN EXHAUST AIR HEAT PUMP?

NEW BUILD OR REPLACEMENT?

For an exhaust air heat pump to work, the necessary ventilation system has to be constructed at the same time as the house itself. It is neither cost-effective nor practical to install an exhaust air system after the house has been built. This means there are two very specific situations in which you should choose a NIBE exhaust air heat pump:

1. When building a new house or developing new apartments

Choose an exhaust air heat pump at the planning stage and the necessary ventilation ducts will be included in your home's design. When your house is ready and the exhaust air heat pump is installed, you can start to enjoy the most efficient indoor heat recycling on the market. Fresh warm air will flow into your home, hot water will run from your taps and your energy bills will be a fraction of the usual amount!

When building a new house or developing new apartments, there are numerous heating systems and different combinations of energy sources to choose from. The one you select will obviously depend on the size of the house and the household's energy demands, as well as the extent of your 'green ambitions'. However, as a rule of thumb, a NIBE exhaust air heat pump is the most cost-efficient solution for small to medium sized homes. For larger houses, we recommend NIBE's FLM exhaust air module combined with a ground source heat pump.

2. When it's time to replace an old exhaust air heat pump

If your home was originally constructed to accommodate an exhaust air heat pump, and the original pump is reaching the end of its service life, this is the perfect time to switch to one of NIBE's new generation of heat pumps, and make your heating system more energy efficient than ever.

About 50% of the exhaust air heat pumps sold in Sweden by NIBE go to replace existing ones. We have both the products and specialist expertise to provide you with an exhaust air heat pump that matches your exact needs. Whatever the model and make of your old heat pump, we can offer a suitable replacement.

An exhaust air pump is an absolute must for newly built, well-insulated houses. For a very reasonable investment, it gives you correct ventilation and the lowest possible energy consumption per square metre.

HOW DO EXHAUST AIR HEAT PUMPS WORK?

An exhaust air heat pump extracts air via ventilation ducts positioned in the wet rooms of the house such as bathrooms, kitchens* and utility rooms. Ventilation can take place in two different ways: by exhaust air only or by a combination of exhaust air and heated intake air.

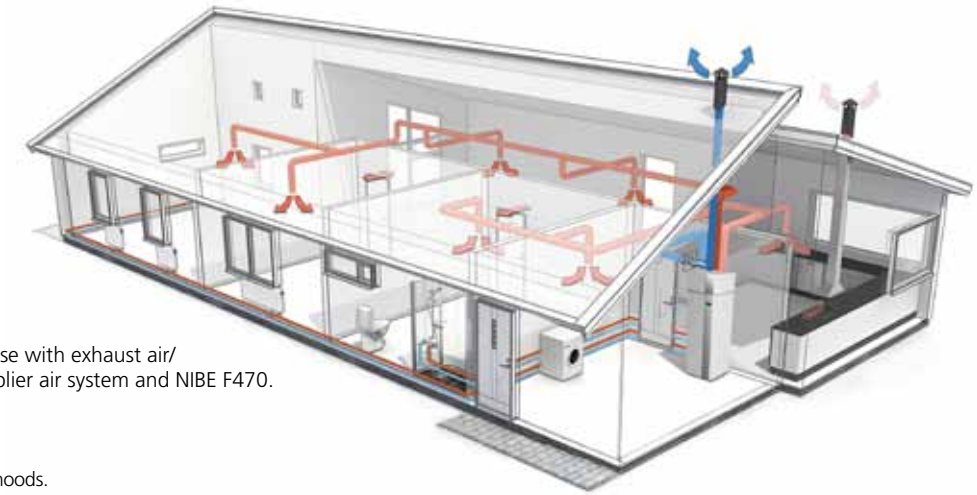
In the former, the air in the house is conveyed from rooms with outdoor air diffusers to rooms with exhaust air diffusers. The latter is designed for houses with heating systems where some of the heat supply is provided by a heated supply air. The air in the house is conveyed from rooms with supply air diffusers to rooms with exhaust air diffusers.

On its way out of the house, heat is extracted from the old air and transferred into the heat pump's refrigerant circuit. The cooled air is then discharged. Meanwhile, the vapour compression cycle of the heat pump raises the temperature of the refrigerant and transfers the extracted heat into a water-based system that can either warm the domestic hot water or heat the building, or both.

An exhaust air heat pump can cover the heating requirements of a well-insulated house in all but the coldest conditions. When working efficiently, it can reduce your home's energy consumption for heating by up to 50% when compared to conventional heating systems.

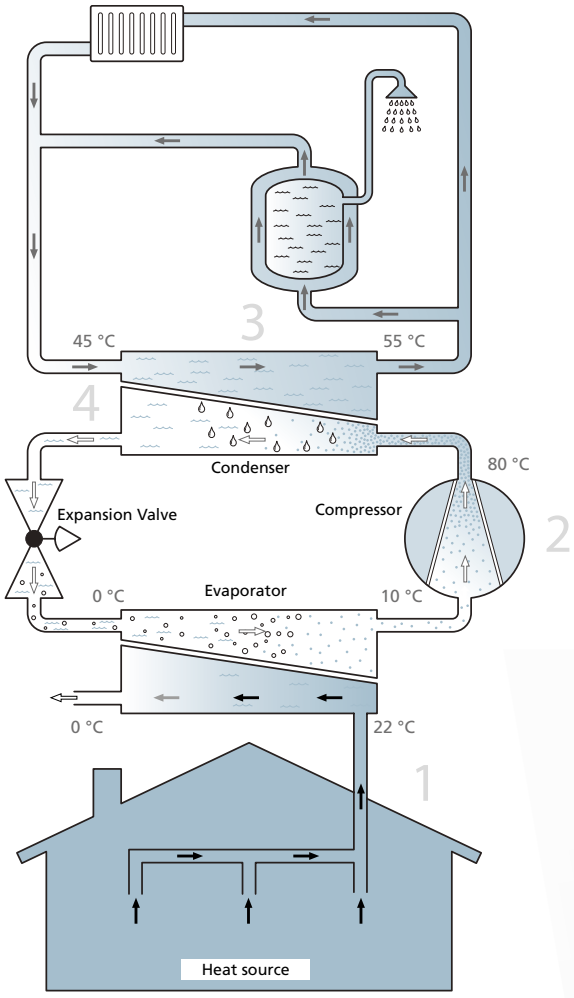
The exhaust air heat pump also works well in conjunction with an underfloor heating system to give you a comfortable indoor temperature, low running costs, a long service life and minimal maintenance.

House with exhaust air system and NIBE F370.



House with exhaust air/ supplier air system and NIBE F470.

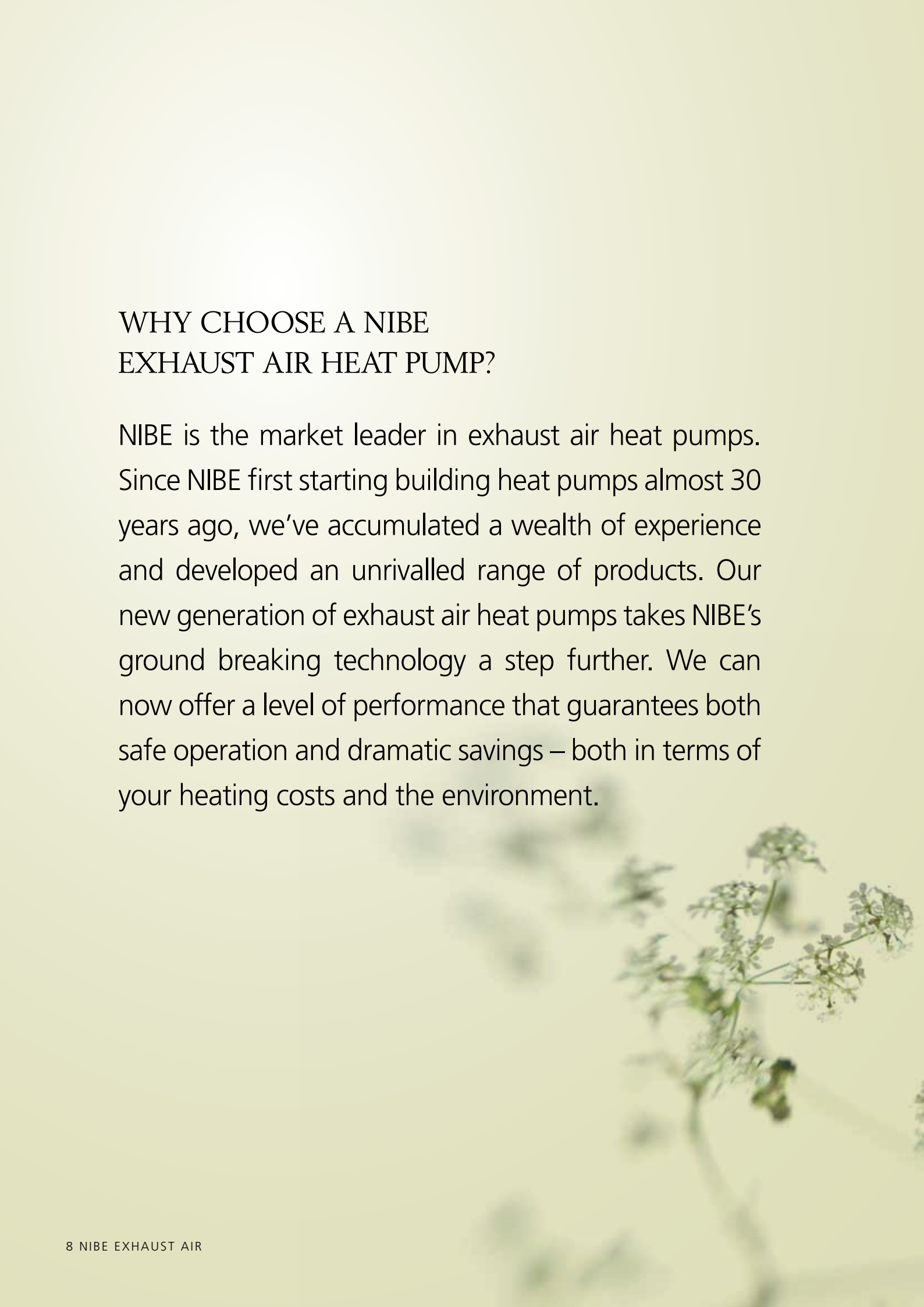
*Ventilation ducts must not be linked with cooker hoods.



1. Warm exhaust air is blown across the heat exchanger and the heat is transferred into the refrigerant circuit. The cold exhaust air passes to the outside of the house.
2. The compressor raises the pressure of the refrigerant, resulting in an increase in temperature in the heat pump.
3. Energy extracted from the exhaust air is transferred into a water-based heating system to heat your home and hot water.
4. In the condenser, the refrigerant reverts to liquid form, ready to turn into gas once more and to collect new heat energy.

WHY CHOOSE A NIBE EXHAUST AIR HEAT PUMP?

NIBE is the market leader in exhaust air heat pumps. Since NIBE first starting building heat pumps almost 30 years ago, we've accumulated a wealth of experience and developed an unrivalled range of products. Our new generation of exhaust air heat pumps takes NIBE's ground breaking technology a step further. We can now offer a level of performance that guarantees both safe operation and dramatic savings – both in terms of your heating costs and the environment.



HERE ARE THREE GOOD REASONS!

Cut your electricity bills dramatically
Frankly, who wouldn't want to do that? Instead of letting the energy you've already paid for escape via the ventilation ducts along with the used inside air, it makes perfect sense to recapture that energy and use it again.

Depending on the model you choose and the size of your home, savings achieved from installing an exhaust air heat pump can be as high as 50%. So you only pay half or even less of the cost of heating and hot water compared with a conventional electric boiler with mechanical exhaust air ventilation. The rest is free.

Reduce environmental impact
By merely extracting existing energy from your home and reusing it to heat up the tap water and the radiators, an exhaust air heat pump leads to much lower CO_2 emissions. What's more, NIBE's exhaust air heat pump can be connected with a solar energy system such as solar panels on the roof of your home. This means you can take advantage of completely free energy from the sun whenever it's available, without being fully dependent upon it.

Meet new building regulations
Install a NIBE exhaust air heat pump in your home and it will be well equipped to meet current and future building regulations. In some parts of Europe, stringent rules concerning domestic energy efficiency and ventilation in newly built homes already apply. Moving forward, these are likely to get stricter and to eventually become standardised across the continent.

More good reasons to choose a NIBE exhaust air heat pump

- Get a complete all-in-one system that provides heating, ventilation and hot water
- We've created a complete exhaust air 'package' which includes every single component, down to the last screw or valve. It's convenient for the installer and cost-effective for you.
- The whole system has been designed to work and look good together.
- You don't need a large utility room to install a NIBE exhaust air heat pump. A NIBE exhaust air heat pump has normal dimensions (approximate: 60cm x 62.5cm x 210cm).
- Your home is continually, automatically ventilated without becoming cold. There's no need to 'air' the rooms.
- You avoid all the problems associated with damp. Houses that have an exhaust air heat pump, and hence a good ventilation system, stay dry and healthy.

NIBE exhaust air heat pump installed in your home

The illustration on this page shows some of the many advantages you get from installing an exhaust air heat pump in your home. However, the different heat pump models do vary, so for specific functions and features of all NIBE exhaust air heat pumps, please refer to the product pages 18 – 21.

Three functions in one:
HEATING, DOMESTIC HOT WATER AND VENTILATION

Using your NIBE exhaust air heat pump, all these functions are provided. Water-borne distribution of heating takes place via radiators and/or an underfloor heating system.

Zero visual impact:
TECHNICAL INSTALLATION ALL INDOORS

Since 100% of the technical installation is inside the actual house, there is no visible evidence in your garden. Moreover, there is no need to consider the characteristics of the plot when choosing an exhaust air heat pump for your new home.

Discreet design:
NEUTRAL APPEARANCE, ADAPTED TO ANY INTERIOR

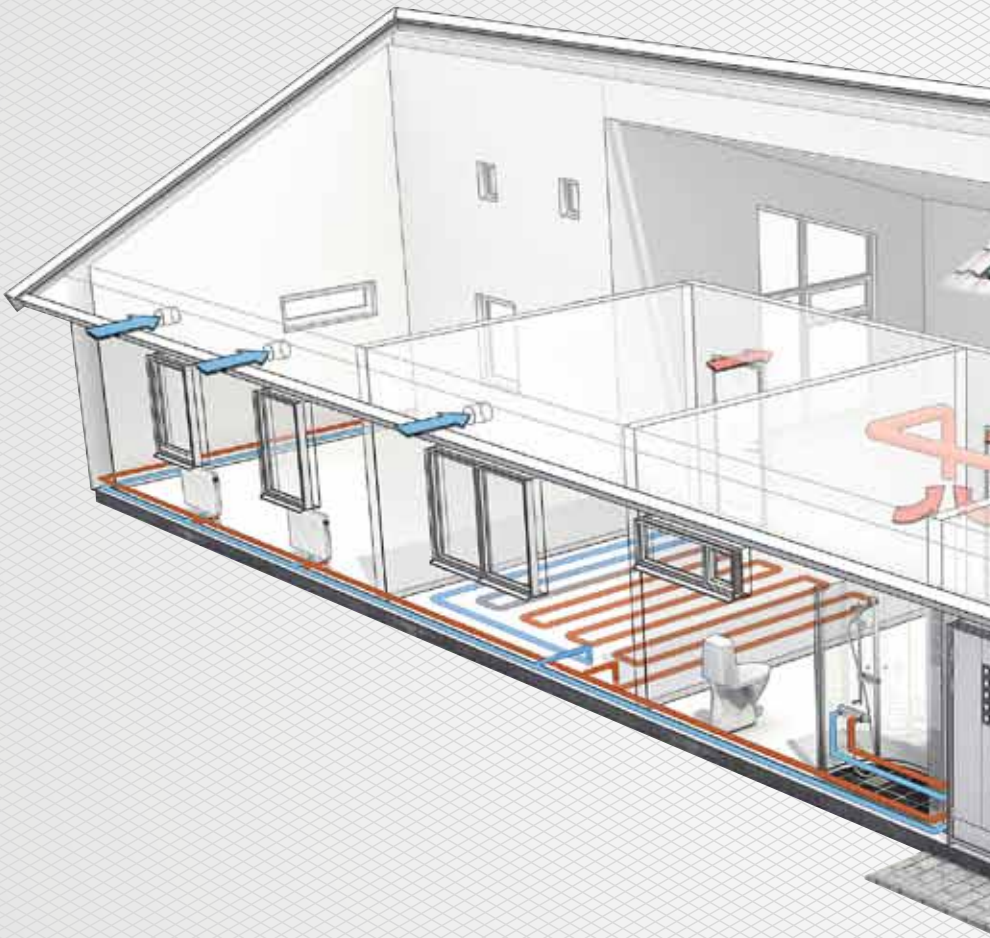
An attractive but discreet design makes our exhaust air heat pumps easy to place in your home. Since the design is pleasing to the eye, it can even be positioned in a more visible area.

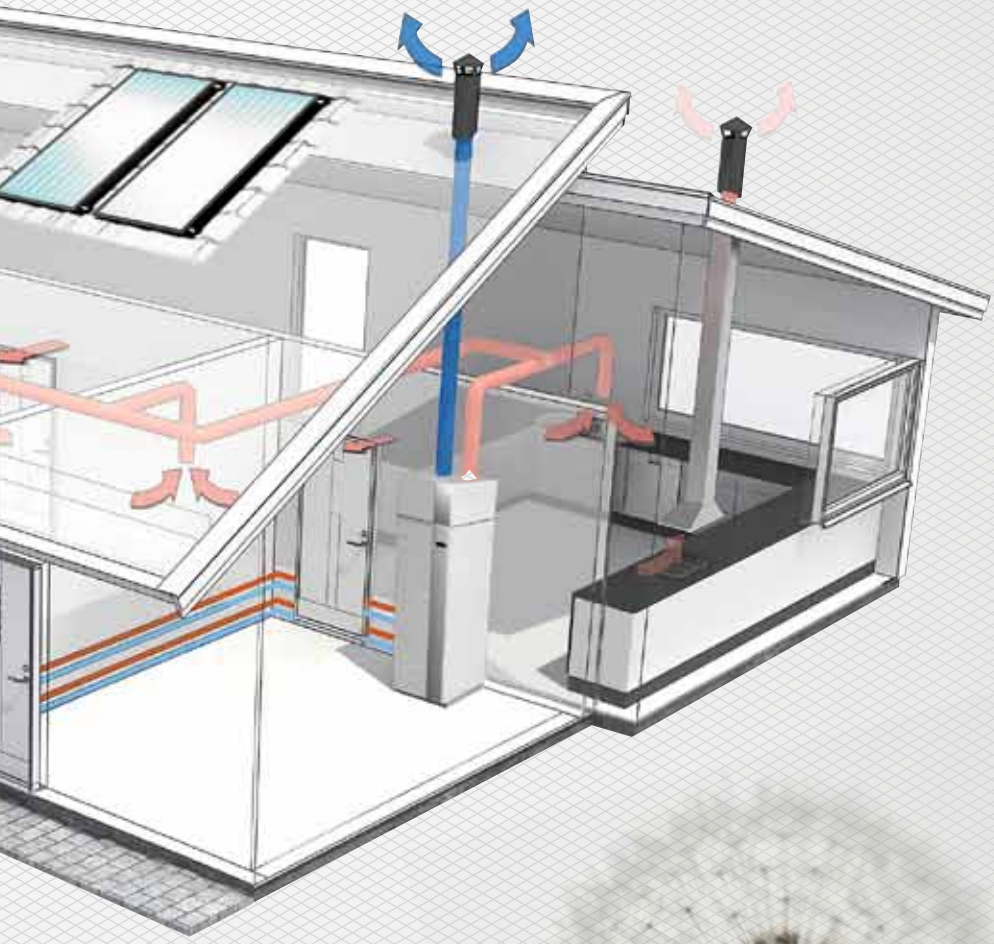
Outdoor sensor:
MINIMISES WASTE AND ENSURES ECONOMICAL OPERATION OF THE HEAT PUMP

A sensor placed on an exterior house wall reports the outdoor temperature to your heat pump so that it can vary output in relation to need.

Compatibility:
CONNECTS EASILY WITH OTHER ENERGY SOURCES

When you need an additional energy source, your NIBE exhaust air heat pump can be hooked up to e.g. district heating or a wood fired boiler.





Ventilation:

TWO WAYS OF VENTILATING YOUR HOME

In some cases, fresh air is supplied directly from wall vents, which is both energy-efficient and quiet. Alternatively fresh air can first be directed into the heat pump to be heated up before distribution. This ensures an even temperature.

Solar energy:

ALMOST EMISSION FREE

Your exhaust air heat pump can be complemented with a green energy source such as solar or wind power. However, this requires for example solar panels and an extra accumulator tank.

NIBE™ SMS 40

REMOTE CONTROL

With SMS 40 you can steer your heat pump remotely via mobile phone to e.g. raise the temperature at home on the way back from vacation. Works with exhaust air heat pumps NIBE F370, NIBE F470, NIBE FLM + NIBE F1245.

NIBE™ ECS 40

DISTRIBUTE HEAT TO MORE THAN ONE SYSTEM

Using the ECS 40 accessory, you can choose to share out the heat from your heat pump to up to four different heating systems. This is the ideal solution if you have, for example, underfloor heating on the ground floor and radiators upstairs. Works with exhaust air heat pumps NIBE F370, NIBE F470, NIBE FLM + NIBE F1245.

NIBE EXHAUST AIR HEAT PUMPS & ACCESSORIES

Presenting the new generation.

A NEW GENERATION OF EXHAUST AIR HEAT PUMPS

NIBE has been steadily developing heat pump technology over many years, leading to increasingly sophisticated, energy-efficient products. However, we understand that our customers want neat, efficient solutions that are practically 'plug & play'. So at the same time as our products have become more sophisticated, we've also made them simpler to install and use.

Efficiency gains
Designed for connection to a heat distribution system such as radiators, convectors and/or underfloor heating, our new generation of exhaust air heat pumps offer astonishing savings and big environmental benefits.

They reduce your energy consumption even more than earlier models. Further reducing CO_2 emissions as well as energy costs, this efficiency gain is good news for home-owners and the environment!

Colour display
With the arrival of the new generation of heat pumps, the concept of user-friendliness has reached a whole new level. A large, easy-to-read multicolour display features clear information about status, operation time and all temperatures in the heat pump; an easily navigated control unit enables users to get the best performance out of the heat pump and maintain a comfortable indoor temperature at all times.

User convenience
Any heat pump model which features an integrated water heater gives you efficient water heating and plentiful hot water, and has a thick a layer of Neopore insulation to prevent heat loss.

You can save even more energy by scheduling your heat pump to provide for the varying energy needs of your household, on a daily, weekly or longer term basis.

User-friendliness
Our new generation of heat pumps has an intuitive interface, which benefits both the end user and the installer. For example, an automatically activated guide leads you through the set-up process quickly and correctly. There is a help function where you can turn for more information about each function, and an alarm which highlights problems and suggests how to solve them. The inclusion of USB ports make software updates and operating data downloads quick and simple to perform.

NIBE's new generation of heat pumps features large, easy-to-read multi-colour display.

NIBE EXHAUST AIR 15

WHAT MAKES THE NEW GENERATION OF NIBE EXHAUST AIR HEAT PUMPS SO EFFICIENT AND USER-FRIENDLY?

Below, we've highlighted some of the key features of our new generation exhaust air heat pumps. Thanks to a combination of advanced engineering and numerous efficiency enhancing features, the NIBE F370 and NIBE F470 give you unrivalled annual average energy savings and make it possible to maintain a comfortable indoor climate all year round, regardless of the weather.

What's more, you don't need to be a technical genius to make these heat pumps work for you. A large, easy-to-read multi-colour display gives everyone the chance to maximize the energy saving potential of this exciting green technology!

Modular design

FOR EASY ADDITION OF ACCESSORIES

This heat pump and its accessories are designed to be placed together and create a streamlined appearance. Whether you choose a cabinet to hide the ventilation pipes or a separate VPB storage tank to supply more hot water, the overall effect is that of a single, neat system.

Insulation of the hot water tank

MINIMISES HEAT LOSS AND SAVES MONEY

An extra thick and efficient layer of insulating material made of Neopore retains the heat inside the tank, which in turn saves you money.

Low energy circulation pump

REDUCES ENERGY CONSUMPTION AND COSTS

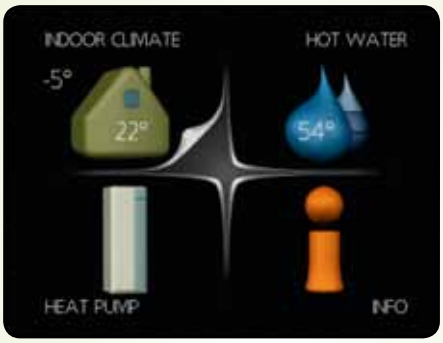
Steered by software in the heat pump, the speed of the circulation pumps changes in accordance with the building's energy requirements and the outdoor temperature.This is highly economical as it means only the correct amount of energy is produced.

Well-structured interior

REDUCING THE NEED FOR A USER MANUAL

Our heat pumps come with a user manual handily positioned in a special pocket inside the aluminium door. However, installers will find that the inside of the heat pump is so neatly and clearly organised that they hardly ever need to refer to the manual.

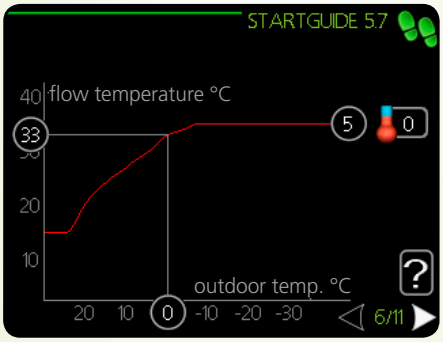
THE DISPLAY



Colour display

FOR A QUICK OVERVIEW OF THE HEAT PUMP'S OPERATION

The unique colour display shows four icons representing the house temperature, the heat pump, the hot water and "information". You can choose to see selected icons when the aluminium door of the heat pump is closed.



Start-up guide

FOR EASY COMMISSIONING

The start-up guide on the display is automatically activated during installation. It poses a series of questions such as which language should be used and which, if any, accessories will be hooked up to the heat pump. In this way, the installer is guided quickly and correctly through the set-up process.

User interface

MAKING IT EASY TO GET THE MOST OUT OF YOUR HEAT PUMP

Open the aluminium door and select which one of the four areas you want to view in more depth. With just three commands to choose from – select, return and scroll – navigation could not be more straight forward. Yet behind this simple exterior lies a sophisticated control system, enabling you to adjust the climate in your home, boost hot water capacity, switch to economy mode before a weekend away …and much more besides.

USB ports

FOR UPLOADING AND DOWNLOADING DATA

Having USB ports give several advantages. For example, home-owners can download historic operating data onto a memory stick and give it to their local NIBE specialist, thereby eliminating the need for a home visit.

Exterior design

AN ATTRACTIVE PIECE OF EQUIPMENT IN YOUR HOME

The main body of the heat pump is plain white, which means it fits into your utility room without any problem. There are also attractive design details such as brushed aluminium flap door with a window through which the digital display is visible.

Low energy fan

FURTHER REDUCES POWER CONSUMPTION

At NIBE we design and build heat pumps with the aim of maximising energy savings. The choice of a low energy fan in the ventilation unit is one more example of this principle at work.

NIBE EXHAUST AIR HEAT PUMPS PRODUCT RANGE

NIBE™ F205P

A complete heat pump for hot water, ventilation, heat recycling to part of the heating system. Suitable for houses where heating is supplied partly by small floor coils or individual water radiators and partly by electric radiators.

The NIBE F205P has an integrated exhaust air fan, electric boiler, low energy circulation pump and water heater with maintenance-free stainless steel corrosion protection. The heat pump ventilates the house, heats the hot water and delivers heat to smaller radiator/underfloor systems or supply air units.

A 3 kW immersion heater is connected if the output from the heat pump is insufficient. The insulation consists of moulded, freon-free polyurethane, which keeps heat losses to a minimum.

NIBE F205P

Height/Width/Depth	2 095/600/615 mm
Net weight	195 kg
Water capacity, outer jacket	70 litres
Water capacity, hot water cylinder	170 litres
Electrical connection	230 V~ 1-phase + N
Refrigerant	R290 (propane)
Compressor rated input	550 W
Immersion heater	3 kW
Corrosion protection	Stainless steel
Savings/year*	4 000 - 7 500 kWh

NIBE™ FLM module + NIBE™ F1245

Enjoy extra savings when you combine an advanced ground source heat pump with an exhaust air module.

Developed to work with NIBE ground source heat pumps, the NIBE FLM exhaust air module recycles mechanical exhaust air, thereby improving your indoor air quality at the same time as reducing your heating costs. It has an integrated low energy fan, so its speed can be adjusted to obtain more or less ventilation as needed. Everything is shown on the heat pump display and can be centrally controlled along with the heat pump itself, thus helping homeowners to further optimise their household's energy savings. The module can be fitted directly to the heat pump or hung up on the wall.

Combine with a NIBE F1245, a highly advanced ground source heat pump which includes an integrated hot water heater, immersion heater, low energy circulation pumps and a control system. Suitable for connection to a heat distribution system such as radiators, convectors or underfloor heating, the F1245 produces heat safely and economically. NIBE F1245 is equipped with a control unit to ensure you always have a comfortable temperature in your home. Clear information about status, operation time and all temperatures in the heat pump are shown on the large and easy-to-read display, thus eliminating the need for external unit thermometers.

NIBE FLM & NIBE F1245

Types	F1245 – 6, 8, 10, 12 kW
Height/Width/Depth	2 100/600/625 mm
Net weight	360 kg
Water capacity, hot water cylinder	180 litres
Electrical connection	230 V~ 1-phase + N
Refrigerant	R407C
Immersion heater, max	9 kW
Corrosion protection	Copper
Savings/year*	10 000 – 30 000 kWh

* Value varies, as it is dependent on the energy demand and exhaust air volume flow.

NIBE™ F370

NIBE F370, one of our new generation of heat pumps, provides you with cost-effective and environmentally friendly domestic heating. It features an integrated water heater, immersion heater, low energy circulation pump and control system to ensure reliable and economical operation. The built-in water heater is insulated with environmentally friendly thermal insulating material which minimises heat loss. Equipped with a low energy ventilation fan, F370 ventilates your home by the exhaust air method. Air is conveyed from rooms with outdoor air diffusers to rooms with exhaust air diffusers - thus ventilating the whole building.

NIBE F370 can be connected to any low temperature distribution system such as water-based radiators or underfloor heating. It is also prepared for connection to several external products and accessories e.g. an extra water heater.

A clear, easy-to-read display screen gives you information about the heat pump's status, operating times and temperature readings. Heat, hot water production and even ventilation can be scheduled day by day or for longer periods such as during holidays. The heat pump is also equipped with a USB-port for quick software updates and information downloads.

NIBE F370

Height/Width/Depth	2 100/600/615 mm
Net weight	194 kg
Water capacity, outer jacket	70 litres
Water capacity, hot water cylinder	170 litres
Electrical connection	230 V~ 1-phase + N
Refrigerant	R290 (propane)
Compressor rated input	650 W
Immersion heater	8 kW
Corrosion protection	Stainless steel/Copper/Enamel
Savings/year*	6 000 - 8 500 kWh

NIBE™ F470

NIBE F470, one of a new generation of heat pumps, provides you with cost-effective and environmentally friendly domestic heating. It features an integrated water heater, immersion heater, low energy circulation pump and control system to ensure reliable and economical operation. The built-in water heater is insulated with environmentally friendly thermal insulating material which minimises heat loss.

Equipped with two low energy fans, NIBE F470 ventilates your home with a combination of exhaust air extraction and heated supply air. Exhaust air is drawn out from the house and supply air is drawn in through a duct in the exterior wall. When the supply air passes through the heat pump, it is heated up and diffused to the chosen rooms as needed.

NIBE F470 can be connected to any low temperature distribution system such as water-based radiators or underfloor heating. It is also prepared for connection to several external products and accessories e.g. an extra water heater. A clear, easy-to-read display screen gives you information about the heat pump's status, operating times and temperature readings. Heat, hot water production and even ventilation can be scheduled day by day or for longer periods such as during holidays. The heat pump is also equipped with a USB-port for quick software updates and information downloads.

NIBE F470

Height/Width/Depth	2 100/600/615 mm
Net weight	194 kg
Water capacity, outer jacket	70 litres
Water capacity, hot water cylinder	170 litres
Electrical connection	230 V~ 1-phase + N
Refrigerant	R290 (propane)
Compressor rated input	650 W
Immersion heater	8 kW
Corrosion protection	Enamel/Stainless steel
Savings/year*	6 500 - 9 500 kWh

ACCESSORIES

For a neater installation

NIBE™ Cabinet
Hide unsightly ventilation pipes away inside this specially designed cabinet.

Available in heights:
245 mm, 345 mm and 385-535 mm

Control the heat pump from your mobile phone

NIBE™ SMS 40
GSM remote control lets you control your heat pump remotely via mobile phone so you can e.g. raise the temperature at home on the way back from vacation. Works with exhaust air heat pumps NIBE F370, NIBE F470, NIBE FLM + NIBE F1245.

Solar kit

NIBE™ Solar 40
NIBE SOLAR 40 enables solar heating with your heat pump. With additional solar panels and VPAS you get a complete system.

Distribute heat to more than one system

NIBE™ ECS 40
Using the ECS 40 accessory, you can choose to share out the heat from your heat pump to up to four different heating systems. This is the ideal solution if you have, for example, underfloor heating on the ground floor and radiators upstairs. Works with exhaust air heat pumps NIBE F370, NIBE F470, NIBE FLM + NIBE F1245.

The convenient way to read your heat pump

NIBE™ RMU 10
With this handy remote control unit positioned in your hallway, kitchen (or wherever you want to put it) you can keep in touch with what's happening at the heat pump and change the most common settings remotely. Works with exhaust air heat pumps NIBE F370, NIBE F470, NIBE FLM + NIBE F1245.

AN INVESTMENT IN THE FUTURE

When you install a NIBE exhaust air heat pump you can reduce your energy costs by up to two thirds (2/3).

NIBE exhaust air heat pumps are ideal for houses of most sizes. Their control system is designed to work perfectly and provide heat for both water-based traditional radiators or underfloor heating systems. See what kind of savings you can achieve below.

Detached house heated by NIBE exhaust air heat pumps

	NIBE F205P	NIBE F370	NIBE F470	NIBE FLM/F1245
Saving* (kW/year)	4 000 - 7 500	6 000 - 8 500	6 500 - 9 500	10 000 - 30 000

** This value varies, depending on energy used and exhaust air flow*

CASE

NIBE CONTRIBUTES TO FRESHNEY GREEN'S 'CODE 5' SUSTAINABLE HOME

The background

Freshney Green is set to become one of the showpiece developments in the Grimsby area, transforming an ex-Council Estate with a particularly bad name into a pleasantly green community of 440 modern, eco-friendly homes split 60/40 between private and Affordable Housing. The latter is taken by the Shoreline Housing Partnership, which runs around 8,000 homes in North East Lincolnshire and among the new houses built for them by Stamford Homes is one of the first in the country to conform to the stringent requirements of Code5 of the CSH [Code for Sustainable Homes]. The CSH coding, increasingly used as a sales tool by Estate Agents exceeds minimum Building Control requirements, for the first time offers a logical scale of environmental achievement. Code 3 has now been set as a minimum for new publicly funded residential developments but Code 5 takes sustainability to new levels.

Solution

In addition to employing all the latest in glazing and insulation technology for heat retention, Stamford Homes also installed a NIBE F370 Exhaust Air Heat Pump which generates efficiencies in heating and hot water by extracting warm air generated from the wet rooms such as bathroom and utilising this via a heat exchanger to assist recycling to heat the dwelling thereby reducing the demand of electricity when compared to the heating system of a conventional residential dwelling, the Code 5 dwellings have additional PV solar panels installed on the roof which generate electricity and are utilised to further reduce the overall electricity consumption of the dwelling.

Results

Shoreline's new Code 5 home is a credit to the new spirit inherent in the Freshney Green estate. It is pleasantly situated with newly planted flowering trees at the front and mature shrubs and trees behind, is a delightfully designed family home with an integrated car port and, it goes without saying, it is as green as grass. The new inhabitants can enjoy centrally heated warmth at a genuinely affordable cost.

NEW TIMES CALL FOR A NEW APPROACH

We all know we've got to reduce emissions. The question is how?

"Green" thinking might once have been a luxury, but lately it has become a necessity that none of us can afford to ignore. Increasingly, the reduction of CO_2 emissions is becoming a legal requirement as well as an environmental necessity.

Over 70% of an average home's CO_2 emissions are caused by its heating and hot water systems. In order to reduce this figure, we need to start implementing greener, more sustainable technologies across the board. Only then, will we see a significant reduction in CO_2 emissions.

Meanwhile the prices of traditional energy sources are rising steadily, with the result that more and more people feel inclined to consider alternative, more efficient energy sources.

Now as their customers have started demanding a solution, builders, architects and property developers can no longer ignore the need to employ alternative technologies that make better use of the world's energy resources.

COMBINE TWO CLEAN, RENEWABLE ENERGY SOURCES!

Solar energy is the queen of all 'green' energy sources. It is not only free; it is silent, renewable and produces no air or water pollution. The only snag is, the sun doesn't always shine and you can't store solar energy for more than a few days. That's why NIBE has come up with a solution for combining solar energy with a heat pump. This means everyone can enjoy free energy from the sun, even if you live in a country where daily sunshine is not guaranteed. *Find out more on www.nibe.co.uk*

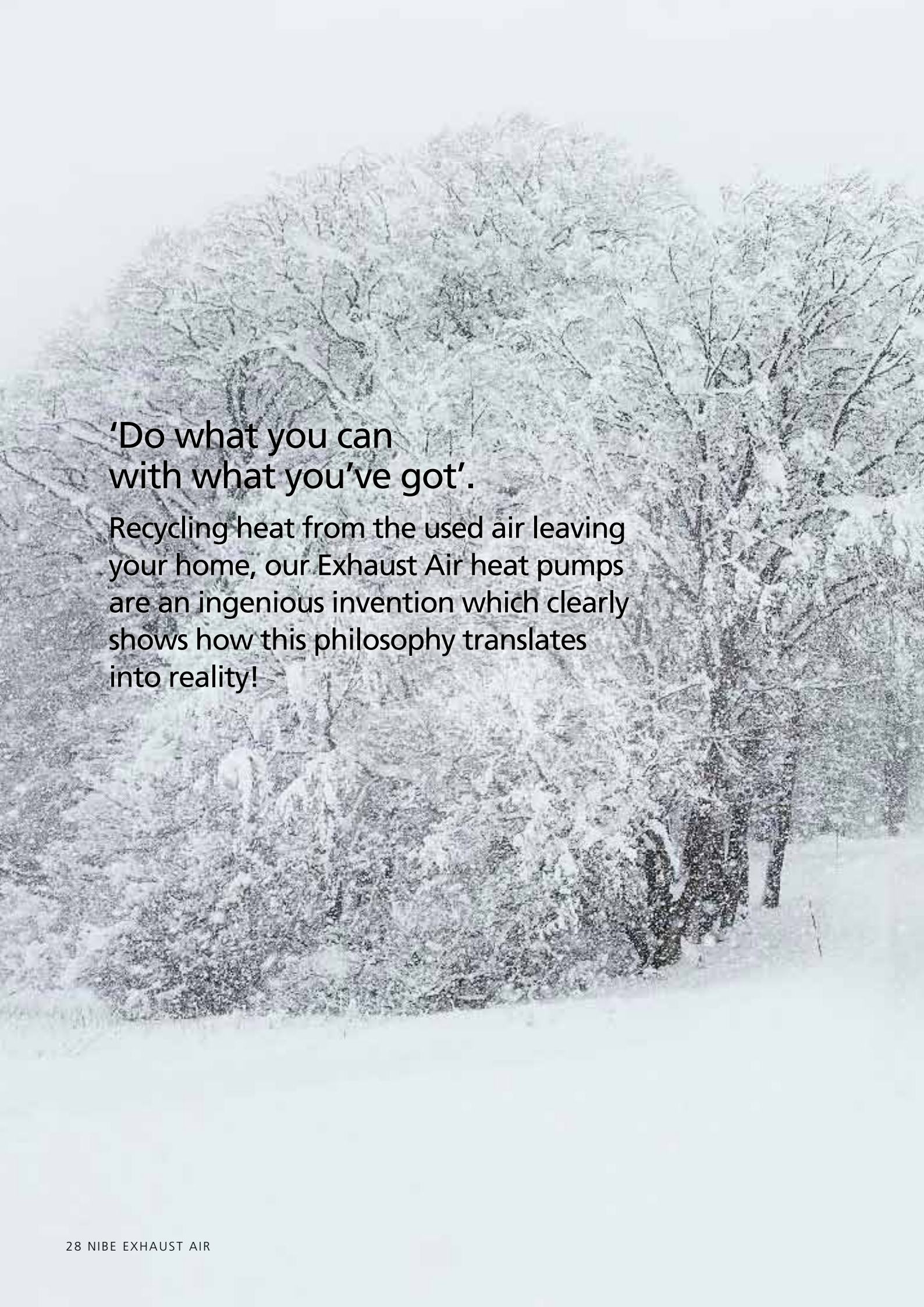
Neither the heat pump nor a solar energy system uses any combustion process to generate heat. The exhaust air heat pump simply recycles existing energy and reuses it to heat your home and hot water.

In comparison with other heating systems, the amount of electricity needed is low. That's because electricity is not the main energy source, it's only needed to run the heat pump and enable the heat extraction process. Solar panels require no electricity at all.

Working towards a zero carbon future

The drive to reduce energy consumption and the impact its use has on the environment is crucial and increasingly important to us all. Why not take a step closer towards a zero carbon future and power your heat pump using a renewable energy source such as wind power or hydro energy?

See www.nibe.co.uk for more information.



‘Do what you can with what you’ve got’.

Recycling heat from the used air leaving your home, our Exhaust Air heat pumps are an ingenious invention which clearly shows how this philosophy translates into reality!

NIBE OF SWEDEN

Living in harmony with nature

The Swedes have a long and impressive track record of clever, money-saving innovations that use resources sparingly. The simple reason for this is that Sweden was historically a poor agrarian country. A harsh winter climate made food scarce for many months, necessitating careful forward planning.

Today, Sweden is a technologically advanced country with a successful economy, so this is no longer necessary. However, the mindset continues to be manifested in the form of fabulous, cost-saving innovations.

NIBE is a perfect example of the economical Swedish mind at work! The company was founded by Nils Bernerup in 1952, after a particularly cold winter. And over the last 60 years it has become Sweden's leading supplier of domestic heating products, continually driving the development of ever-more efficient heating methods.

Early products included water heaters and pressure vessels. In the 1970s these were supplemented by electric boilers. Heat pumps and a wide range of other heating products that meet the needs of the European markets were later added to the mix.

Nowadays, NIBE is a leading player in both heating and cooling systems around Europe. We strive to offer innovative solutions that not only save energy but which also reduce CO_2 emissions. Together with our customers, we're working towards a more sustainable future, one home at a time.

THREE KINDS OF HEAT PUMPS FROM NIBE

Exhaust air heat pumps

Ideal for heating domestic premises and tap water. An exhaust air heat pump ventilates the building and recovers the energy in the warm air, reusing it to warm up your sanitary water or fuel a central heating system.

Ground source heat pumps

Drawing heat from surface soil, bedrock or the water in a nearby lake, this is a great option for heating houses, multiple-unit properties and other larger buildings. Available with or without an integrated water heater.

Air/water heat pumps

These pumps extract heat from the ambient outside air. In contrast to simpler types of air-to-air heat pumps, they are connected to the building's heating system and able to produce both heat and hot water.

European Directive 20/20/20

The 20/20/20 European directive imposes compulsory targets on the EU's 27 member states, specifying that 20% of energy consumption must be met by renewable sources by 2020. Since air/water heat pumps are now classified as a renewable energy source, their installation will help member states reach this ambitious target. And in many cases, local or regional authorities are offering home owners subsidies to switch their existing heating systems to a renewable source such as a heat pump.

20/20/20

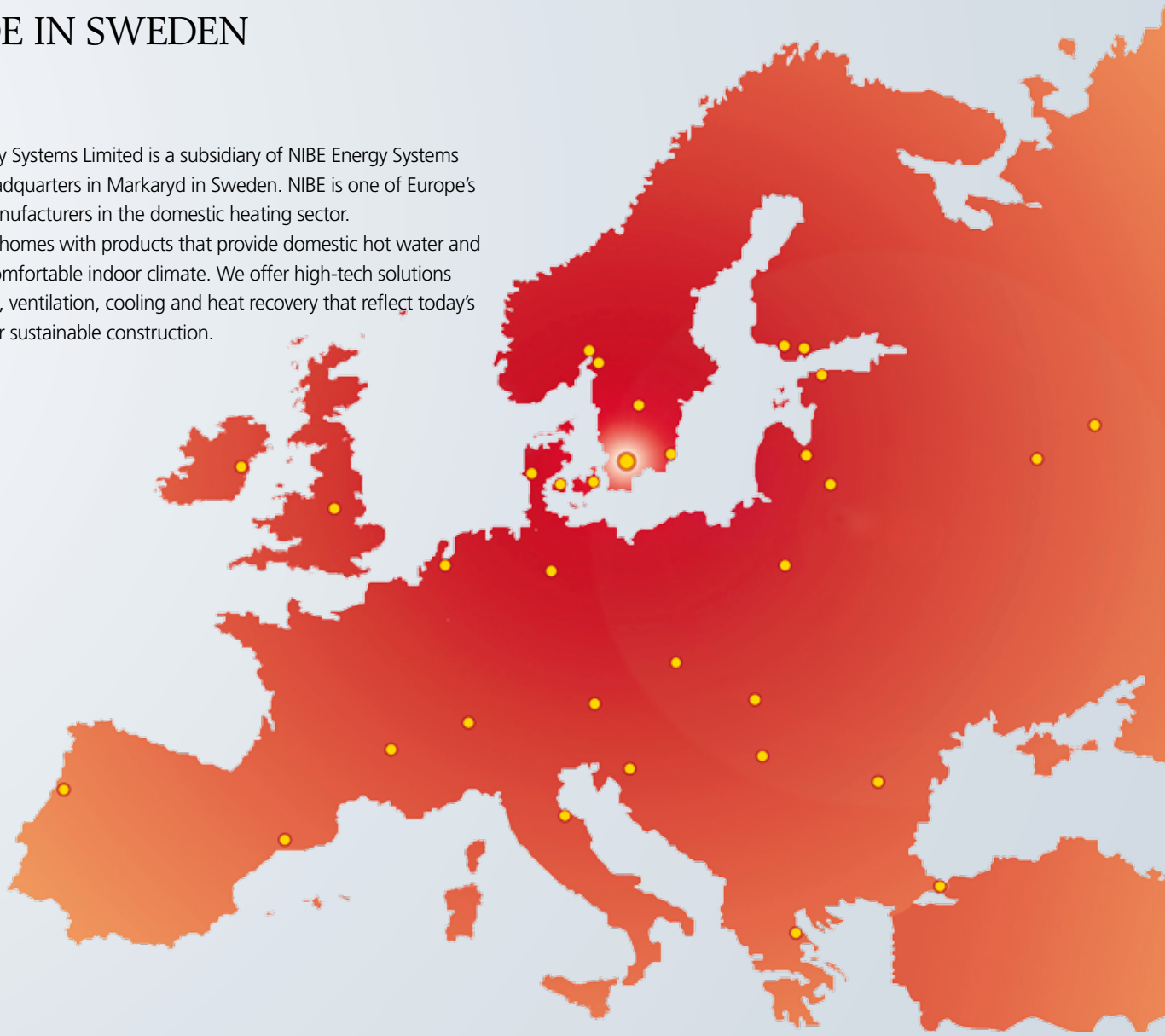
Exhaust air heat pumps

Ground source heat pumps

Air/water heat pumps

MADE IN SWEDEN

NIBE Energy Systems Limited is a subsidiary of NIBE Energy Systems with its headquarters in Markaryd in Sweden. NIBE is one of Europe's leading manufacturers in the domestic heating sector.
We supply homes with products that provide domestic hot water and ensure a comfortable indoor climate. We offer high-tech solutions for heating, ventilation, cooling and heat recovery that reflect today's demand for sustainable construction.



A new generation of heat pumps
DESIGNED FOR EARTH

What do we mean by "A new generation of heat pumps – designed for earth?"

Our products are designed to USE THE EARTH
The main energy sources for NIBE heating systems are the earth, the sun, the ambient air or a water source near your home – one or more of which occur naturally all over the planet and are provided free by Mother Earth.

Our products are relevant ALL OVER THE EARTH
Since we now offer a system with both heating and cooling functions, you can use a NIBE heating system anywhere, regardless of your geographic location.

Our products are designed with the HEALTH OF THE EARTH in mind
NIBE products have a very low environmental impact compared to other heating systems currently available. They do have some impact, as do all manufactured goods, but we are continually working to minimise this and to deliver an environmental payback in the form of reduced emissions.

NIBE ENERGY SYSTEMS LIMITED
Unit 3C, Broom Business Park
Bridge Way
Chesterfield, S41 9QG
Tel. 0845 095 1200
Fax. 0845 095 1201
www.nibe.co.uk

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